

CLAIMS

1. A refrigerating apparatus that is provided with a refrigerant circuit (20) in which a first cooling circuit (110, 120) including a first heat exchanger (111, 121) for cooling inside and a second cooling circuit (30) including a second heat exchanger (131) for cooling inside and a sub compressor (141), which are connected in series, are connected in parallel to a heat source side circuit (40) including a heat source side heat exchanger (43) and a main compressor (41) and

that performs a refrigeration cycle by circulating refrigerant in the refrigerant circuit (20),

10 wherein in the refrigerant circuit (20), a switching mechanism (142) is provided which switches between a first operation where the sub compressor (141) sucks the refrigerant from the second heat exchanger (131) and discharges it to an intake side of the main compressor (41) and a second operation where the sub compressor (141) sucks the refrigerant from the first heat exchanger (111, 121) and discharges it to the second heat
15 exchanger (131), and

during defrosting operation for defrosting the second heat exchanger (131), the second operation is performed in the refrigerant circuit (20) and the refrigerant is sent from the second heat exchanger (131) to the first heat exchanger (111, 121).

20 2. The refrigerating apparatus of Claim 1, wherein

an expansion valve (132) of which opening is variable is provided in the second cooling circuit (30), and

control means (201) is provided which keeps the expansion valve (132) to be opened fully during the defrosting operation.

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3. The refrigerating apparatus of Claim 1, wherein

in the refrigerant circuit (20), a bypass path (150) is provided through which the

refrigerant passes bypassing the sub compressor (141) only during a halted state of the sub compressor (141), and

control means (20) is provided which halts once the sub compressor (141) when the second operation is exchanged to the first operation at termination of the defrosting 5 operation, and then, starts the sub compressor (141) after a predetermined time period elapses.